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EXAMINER

ROBERTS, JESSICA M

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/829,437  
Filing Date: April 22, 2004  
Appellant(s): TOJO, HIROSHI

\_\_\_\_\_  
Michael J. Guzniczak (Reg. No. 59,820)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 07/28/2010 appealing from the Office action mailed 09/14/2009.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 12-23 are pending. Claims 12-23 stand rejected.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

JP-8163488	Matsushita et al.	06-1995
JP 05-147337	Matsushita et al.	01-1995
20040239769	Tojo et al., (Applicants Admitted Prior Art)	12-2004

Official Notice

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 12-17, and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Matsushita et al., JP 8163488 and in view of Applicants Admitted Prior Art (AAPA) and further in view of well known prior art (Official Notice).

**Regarding claim 12**, AAPA teaches A moving image processing method for dividing a moving image sensed between a beginning of recording and an ending of recording on the basis of a plurality of items of additional data which indicate states upon sensing the moving image, wherein the additional data is added t the moving image and is able to be read out for each item from the moving image comprising: a generation step of defining an item group formed of one or a plurality of items selected from the plurality of items (Matsushita teaches this invention aims at offering the equipment which generates the digest which is easy to grasp the contents of a dynamic image in view of this point [0004]. Therefore, it is clear to the examiner that Matsushita teaches to generate a digest of images, which reads upon the claimed limitation) and generating division information corresponding to the item group on the basis of the additional data of the items which belong to the item group (Matsushita teaches to perform the dividing the continues frame into a shot based on camera work. The camera works are zoom operation and pan operation [0020]); a hierarchization step of hierachizing a plurality of division information generated for each item group, and of adding division positions based on division information of an upper layer to division

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positions of division information of a lower layer, and a holding step of holding the division information obtained in the hierarchization step in correspondence with the moving image data (Matsushita teaches with which the information showing a hierarchical structure, i.e., a scene, a cut, and each head frame and termination frame of the shot are memorized is memorized to the hierarchical structure [0023]. Further taught is that as mentioned above, by generating the hierarchical structure of video and memorizing to the storage with video, when photoing video with the equipment equipped with a photographing functions, such as video camera, in this example arbitrary [based on hierarchical structure] after photography –it becomes possible to generate the digits [0025]. Since Matsushita teaches to generate the hierarchical structure of video to the storage with video, it is clear to the examiner that Matsushita discloses to hold the division information obtained from the hierarchical structure, which reads upon the claimed limitation). Matsushita does not explicitly teach hierarchization step of adding division positions based on integrated division information of an upper layer to division positions of integrated division information of a lower layer in accordance with a hierarchical order of a plurality of pieces of integrated division information, which are generated in the generation step in correspondence with a plurality of different item groups.

However, AAPA teaches hierarchization step of adding division positions based on integrated division information of an upper layer to division positions of integrated division information of a lower layer in accordance with a hierarchical order of a plurality of pieces of integrated division information, which are generated in the generation step

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in correspondence with a plurality of different item groups (AAPA teaches FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Since AAPA discloses to divide the image changing points into layers (gain, white balance, zoom and pan), and create a division result, it is clear to the examiner that AAPA teaches to add the changing point layers to create the division result which reads upon the claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of AAPA with Matsushita for providing more efficient image processing.

Matsushita (modified by AAPA) as whole does not explicitly disclose wherein the plurality of division information is hierarchized and the division positions are added in a case that the plurality of division information is generated in the generation step in correspondence with a plurality of an item groups.

However, Official Notice is taken that both the concept and advantage of providing the limitations as claimed are notoriously well known and expected in the art,

and therefore, would have been obvious to incorporate in Matsushita (modified by AAPA) for providing improved editing.

**Regarding claim 13**, Matsushita (modified by AAPA and well known prior art) as a whole teaches everything as claimed above, see **claim 12**. Matsushita is silent in regards to The method according to claim 12, further comprising a setting step of setting the hierarchical order of the plurality of pieces of division information on the basis of division counts of the division information.

However, AAPA discloses For example, FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Therefore, it is clear the examiner that the reference more than fairly suggest or teaches to set a hierarchy based on the division counts. Since AAPA discloses the division positions are based on a plurality of different items that are present together, it would have been obvious modification for one of ordinary skill in the art at the time of the invention to count the division information for providing enhanced image processing, which reads upon the claimed limitation.



Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the teachings of AAPA with Matsushita (modified by well known prior art) for providing more efficient image processing.

**Regarding claim 14**, see rejection and analysis made in claim 13.

**Regarding claim 15**, Matsushita (modified by AAPA) teaches everything as claimed above, see **claim 12**. In addition, Matsushita teaches the method according to claim 12, wherein the hierarchical order of the plurality of pieces of division information is set according to a hierarchical order which is set in advance for respective item groups (Matsushita teaches the block diagram of this example is shown in drawing 1. This example reads into the hierarchy selection means 5 the hierarchical structure information memorized by the hierarchic-structure storage 2, and based on the surface roughness input from the digest surface roughness input means 7, the hierarchy selection means 5 chooses the information on a specific hierarchy from the read hierarchical structure information, and outputs it to the extraction section determination means 6, [0010]. Therefore, it is clear to the examiner that Matsushita discloses to select a specific hierarchy, which would necessitate setting the hierarchy in advance, which reads upon the claimed limitation).

**Regarding claim 16**, Matsushita (modified by AAPA and well know prior art) as a whole teaches everything as claimed above, see **claim 12**. In addition Matsushita teaches the method according to claim 12, further comprising a designation step of designating the hierarchical order of the plurality of pieces of division information (Matsushita teaches the hierarchic structure is generated and the memory address on

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the dynamic-image storage 1 with the information showing the hierarchic structure, i.e., scene and a hierarchy selection means to choose the hierarchy of the section dynamic image extracted according to the inputted surface roughness from said hierarchic-structure storage, [0006] and [0010]).

**Regarding claim 17**, Matsushita (modified by AAPA and well known prior art) as a whole teaches everything as claimed above, see **claim 12**. In addition Matsushita teaches The method according to claim 12, further comprising: a representative image generation step of generating and holding representative images which represent respective intervals of a moving image that are specified by division information of respective layers obtained in the hierarchization step (Matsushita teaches the hierarchic structure is generated and the memory address on the dynamic-image storage 1 with which the information showing the hierarchic structure, i.e., a scene, a cut, and each head frame and termination frame of the shot are memorized is memorized to the hierarchic-structure storage 2. Moreover, to memorize the memory address on the dynamic-image storage 1 of the frame which represents a scene, a cut, and a shot further as hierarchical structure information [0023]) ; and a display step of displaying, when one interval of one layer is designated, representative images of intervals included in the designated interval in a layer lower than the one layer (Matsushita discloses where a dynamic image can be expressed by the hierarchic structure called a frame, a shot, a cut, and a scene in the way. A least significant layer is a frame and a frame is the picture of one sheet photoed at the video rate [0011]. Further, the case where the information on a cut hierarchy was chosen from the hierarchy selection

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means 5, and it is inputted about operation of the extraction section determination means 6 is made into an example, and it explains. With the extraction section determination means 6, the section which extracts the dynamic image of several frames which continued from each cut based on the information on a cut hierarchy is determined. The method of some determination methods of the extraction section being considered and extracting a predetermined frame number from the head of a cut -- or there is a method of extracting the middle predetermined frame number of a cut. Moreover, when it has the frame information which represents a cut as information on the hierarchic structure, you may determine the extraction section that a representative frame is included based on a representative frame.

The read-out means 3 and the display means 4 read the picture of the extraction section determined with the extraction section determination means 6 from the dynamic-image storage 1, and display it [0014]. Therefore, it is clear to the examiner that Matsushita discloses to display an image based on the selected hierarchy. Further, since Matsushita discloses the information is in a hierarchy, then Matsushita is more than fully capable of displaying images that have a lower hierarchical order than what is selected, which reads upon the claimed limitation).

**Regarding claim 19**, Matsushita (modified by AAPA and well know prior art) as a whole teaches everything as claimed above, see **claim 12**. In addition, Matsushita teaches The method according to claim 12, further comprising a storage step of storing the integrated division information obtained in the hierarchization step in a storage medium in correspondence with the moving image data (Matsushita teaches a

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generation of the video digest of a natural display is enabled by storing the generated digest picture in a video storing medium [0042]).

**Regarding claim 20**, Matsushita (modified by AAPA and well know prior art) as a whole teaches everything as claimed above, see **claim 12**. Matsushita is silent in regards to the method according to claim 12, wherein the item group includes one of an environment upon sensing an image, a sensed subject, a subject size upon sensing an image, and an effect applied to a moving image (AAPA teaches a conventional moving image dividing technique. (a) of Fig. 17 shows the changing points (Gain, White Balance, and subject distance, zoom, pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items [0004] and fig. 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of AAPA with Matsushita for providing more efficient image signal processing.

**Regarding claim 21**, see rejection and analysis made in claim 12, except this is a claim to an apparatus with the same limitations as claim 12.

**Regarding claims 22** although Matsushita (modified by AAPA and well known prior art) is silent in regards to the use of a computer readable recording medium recording a control program which makes a computer execute or processor based method, it would obvious to one of ordinary skill that when performing digital signal processing the use of a digital signal processor is used. Further a digital signal processor and computer readable recording medium recording a control program which

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makes a computer execute, are functional equivalents of one another and are used interchangeably. Therefore, it would have been obvious to incorporate a computer readable recording medium recording a control program which makes a computer execute for use when performing digital signal processing.

**Regarding claim 23**, see the rejection and analysis made for claim 22.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushita et al., JP 8163488 (herein referenced as Matsushita) and in view of Applicants Admitted Prior Art (AAPA) and further in view of Matsushita et al., JP 05-147337 (herein referenced as Matsushita'337), and well known prior art (Official Notice).

**Regarding claim 18**, Matsushita (modified by AAPA and well know prior art) as a whole teaches everything as claimed above, **see claim 17**. Matsushita is silent in regards to The method according to claim 17, further comprising an execution step of executing a predetermined process for an interval of a moving image, which corresponds to a representative image selected from the representative images displayed in the display step.

However, an execution step of executing a predetermined process for an interval of a moving image, which corresponds to a representative image selected from the representative images displayed in the display step (By equipping a video recording medium with the above representative picture image extraction image information, it becomes possible to extract the representative picture image in video so that subsequent samples may explain [0011]. Further taught is The information for extracting a representative picture image beforehand is recorded on the video recording medium

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with the video signal, and the above example explained the case where read the extraction information on a representative picture image from a video recording medium, and a representative picture image was extracted. However, even when a part or all of the information for extracting a representative picture image does not exist in a video recording medium, by processing the video signal recorded on the video recording medium, the information for extracting a representative picture image can be acquired, and a representative picture image can be extracted based on the acquired information [0014].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Matsushita'337 with Matsushita (modified by AAPA and well know prior art) for providing a device and video recording medium which extract automatically the representative picture image which fully expresses the contents in video in view of this point [0004].

#### **(10) Response to Argument**

The examiners response to the arguments of the brief concerning the art rejection of claim 12-23 are as follows:

##### **I. Argument of claims 12 and 21**

Appellant argues on pages 17-18 for the feature of hierarchizing a plurality of division information in the case that the plurality of division information is generated in correspondence with a plurality of item groups, the Office asserts that Official Notice can be taken. Appellants have previously contested the application of Official Notice, and pursuant to MPEP § 2144.03, have requested documentary evidence. But in

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support of documentary evidence for Official Notice, the Office Action points right back to the same inadequate AAPA, which the Office Action itself concedes does not disclose this feature. Appellant therefore respectfully submits the Office Action is contradictory on its face, such that there is a clear deficiency in the prima facie case in support of the rejection.

The examiner respectfully disagrees. The claimed feature is disclosed in the Applicants Admitted Prior Art, which was provided to show that it's common and well known in the art. In this case, Applicants Admitted Prior Art (AAPA), discloses in paragraph [0004] that Fig. 17 is a view for explaining the conventional moving image dividing technique. (a) of Fig. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing devices with respect to a single moving image for respective items. (b) of the Fig. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in Fig. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals. The examiner notes that a hierarchy is synonymous with positions. Since AAPA discloses that (a) of Fig. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing devices with respect to a single moving image for respective items. (b) of the Fig. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in Fig. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into

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many intervals, it is clear to the examiner that AAPA discloses the positions (hierarchy) for a plurality of division information (Gain, White Balance, subject distance, Zoom, and Pan) for a plurality of items groups, which reads upon the claimed limitation. Therefore, the examiner maintains that Official Notice (AAPA) discloses the claimed feature.

## II. Argument of claims 12 and 21

Appellant argues on page 18 that figure 17 is not conceded as prior art. In particular, Appellant maintains that a view for explaining a conventional technique does not necessarily mean that the explanation itself is conventional.

The examiner respectfully disagrees. Paragraph [0004] of the Background discloses were fig. 17 is a view for explaining the conventional moving image dividing technique. The elements of Fig. 17 that are explained in paragraph [0004] are considered conventional, as the Appellant has defined fig. 17 as a view for explaining the conventional moving image dividing technique. Thus, the examiner maintains that Fig. 17 is conventional and considered to be Prior Art.

## III. Argument of claims 12 and 21

Appellant argues on page 25 that Figure 17 can not possibly show hierarchization of a plurality of division information, as all of the plurality of division information are on the same level.

The examiner respectfully disagrees. The claimed feature is disclosed in the Applicants Admitted Prior Art, which was provided to show that it's common and well known in the art. In this case, Applicants Admitted Prior Art (AAPA) discloses in paragraph [0004] that Fig. 17 is a view for explaining the conventional moving image



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dividing technique. (a) of Fig. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing devices with respect to a single moving image for respective items. (b) of the Fig. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in Fig. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals. Since a hierarchy is defined as graded or ranked series (see Merriam Webster's Collegiate Dictionary, Tenth Edition), and Fig. 17 clearly discloses where the changing points are positioned in the ordered of Gain, White Balance, Subject distance, Zoom and Pan. Therefore, fig. 17 clearly discloses where position (hierarchy) of the changing points (division information) is in order of the Gain, White Balance, Subject distance, Zoom, and Pan, which reads upon the claimed limitation.

Appellant argues on page 25 that the Office Action also relies on Official Notice for the feature of hierarchizing a plurality of division information generated for each item group of a plurality of items. Upon Appellant's traversal, however, the documentary evidence provided by the Office Action for such Official Notice is simply Appellants Figure 17, which, as discussed above, (i) concededly does not disclose such feature, (ii) is not necessarily prior art, and (iii) can not possibly show hierarchization of a plurality of division information, as all of the division information are on the same level.

The examiner respectfully disagrees. The claimed feature is disclosed in the Applicants Admitted Prior Art, which was provided to show that it's common and well known in the art. In this case, Applicants Admitted Prior Art (AAPA) discloses in

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paragraph [0004] that Fig. 17 is a view for explaining the conventional moving image dividing technique. (a) of Fig. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing devices with respect to a single moving image for respective items. (b) of the Fig. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in Fig. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals. Since a hierarchy is defined as graded or ranked series (see Merriam Webster's Collegiate Dictionary, Tenth Edition), and Fig. 17 clearly discloses where the changing points are in the order of Gain, White Balance, Subject distance, Zoom and Pan. Therefore, fig. 17 clearly discloses where order (hierarchy) of the changing points (division information) is in order of the Gain, White Balance, Pan, and Zoom. Since AAPA discloses to divide the image changing points into layers ordered by the gain, white balance, zoom and pan, and create a division result, it is clear to the examiner that AAPA teaches to add the changing point layers to create the division result which reads upon the claimed limitation.

Appellant argues on page 25 that thus, the applied art fails to disclose or suggest hierarchizing a plurality of division information generated for each item group of a plurality of item groups. Therefore, the rejection of Claims 12 and 21 should be reversed.

The examiner respectfully disagrees, and directs the Appellant to the response provided above for similar arguments, see Argument I.

Appellant argues on page 26 that the Office Action again apparently relies on Appellants Figure 17 for the feature of adding division positions to division information of a lower layer, based on division information of an upper layer. As indicated above, Appellants does not concede that Figure 17 is prior art. However, even if Figure 17 is accepted as AAPA solely for the purposes of argument, Figure 17 does not disclose or suggest the claimed addition.

The examiner respectfully disagrees. AAPA teaches FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Since AAPA discloses to divide the image changing points into layers (gain, white balance, zoom and pan), and create a division result, it is clear to the examiner that AAPA teaches to add the changing point layers to create the division result which reads upon the claimed limitation). Since the changing points are ordered by the Gain, White Balance, Subject distance, Zoom, and Pan, the examiner interprets this order to be a hierarchy, where

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the gain is higher than the white balance, white balance higher than subject distance, subject distance higher than zoom, and zoom higher than pan (upper and lower layers).

Appellant argues on page 27 that since figure 17 does not in the first instance disclose hierarchical upper and lower layers, Appellant submits that Figure 17 therefore can no possibly disclose or suggest adding division positions to division information of a lower layer of such a hierarchy, based on division information of an upper layer thereof.

The Examiner respectfully disagrees, and directs the Appellant to the response provided for similar arguments.

Appellant argues on page 27 that page 9 of the Office Action also apparently relies on Official Notice for the feature of adding division positions to division information of a lower layer, based on division information of an upper layer. To reiterate, the documentary evidence provided by the Office Action for such Official Notice is simply Appellants Figure 17, which, as discussed above, (i) concededly does not disclose such feature, (ii) is not necessarily prior art, and (iii) can not possibly show hierarchization of a plurality of division information, as all of the division information are on the same level.

The Examiner respectfully disagrees and directs the Appellant to the response provided to similar arguments.

Appellant argues on page 27, thus the applied art fails to disclose or suggest adding division positions to division information of a lower layer, based on division information of an upper layer. Therefore, the rejection of Claims 12 and 21 should be reversed for this reason as well.

The examiner respectfully disagrees. AAPA teaches FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Since a hierarchy is defined as a graded or ranked series (see Merriam Webster's Collegiate Dictionary, Tenth Edition), and Fig. 17 clearly discloses where the changing points are ordered by Gain, White Balance, Subject distance, Zoom and Pan. Therefore, fig. 17 clearly discloses where the order (hierarchy) of the changing points (division information) is in the order of the Gain, White Balance, Pan, and Zoom. Further, the changing points are ordered by the Gain, White Balance, Subject distance, Zoom, and Pan, the examiner interprets this order to be a hierarchy, where the gain is higher white balance, white balance higher than subject distance, subject distance higher than zoom, and zoon higher than pan. Since AAPA discloses to divide the image changing points into layers (gain, white balance, zoom and pan), and create a division result, it is clear to the examiner that AAPA teaches to add the changing point layers to create the division result which reads upon the claimed limitation.

#### IV. Rejection of Claims 12 and 21

Appellant argues on page 30 that in particular, the Office Action provides no rationale or guidance as to how such efficiency might be obtained. There is no rationale, supported by art-based evidence, that Matsushita '488 is somehow inefficient. There is no rationale, supported by art-based evidence, that those of ordinary skill would have perceived the precise nature of inefficiencies in Matsushita '488. And, there is no rationale, supported by art-based evidence, that those of ordinary skill would have known of the specific techniques to address these unspecified inefficiencies in such a way as to result in the arrangement claimed herein.

The examiner respectfully disagrees. Matsushita '488 is concerned with creating a video digest generation method, [0001] and discloses where conventionally, as a means to grasp the contents of video for a short time, by fast forward reproduction of VTR, thinned out the frame equally, and it was displayed, and there was a method of adjusting display speed manually using good gear change reproduction of a jog shuttle dial etc, [0002]. Further, although, the picture could be displayed in good gear change reproduction at the speed which was adapted for the users interest and degree of comprehension, there was a problem that all the video covering a long time also had to be operated manually, [0004]. AAPA discloses where since a moving image is divided in correspondence with the changing points of operation (pan, tilt) or states (focus and the like) of a moving image sensing device, a playback process from a desired location, a moving image edit process, and an automatic generation of a summary of a moving image can be achieved, thus allowing easy confirmation of the contents. Such method is effective especially when one moving image contains various subjects to be sensed

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or when an image sensing environment changes, see paragraph [0002]. Since, Matsushita '488 is concerned with creating a digest of video content and for short and long video to manually adjust the display speed, and AAPA discloses that for video image divided with the changing points or states, a playback process from a desired location, a moving image edit process, and an automatic generation of a summary of a moving image can be achieved, thus allowing easy confirmation of the contents.

Therefore, it would have been obvious to one of ordinary skill in the art at time of the invention to incorporate the teachings of Matsushita with AAPA for providing a playback process from a desired location, a moving image edit process, automatic generation of a summary of a moving image that allows easy confirmation of the contents, which would improve image processing. Further, the examiner notes that KSR does not require that the rationale necessarily comes from the art itself. However, in this case, the rationale can be found in AAPA.

Appellant argues on page 30 that moreover, given the incompatibility between Matsushita '488 and AAPA, one of ordinary skill in the art would not be motivated to combine these references. Specifically, Matsushita '488 teaches hierarchization of data, whereas Appellants Figure 17 teaches creating divisions in a moving image without hierarchization. There is no suggestion in Matsushita '488 that removing hierarchization would somehow be beneficial or helpful. Thus, Appellant respectfully submits that an ordinary skilled artisan would not be motivated to combine Matsushita '488 and the AAPA, as the teachings of the AAPA contradict and in fact teach away from the teachings of Matsushita '488. This incompatibility is evidence that those of ordinary skill

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would believe that the proposed combination of Matsushita '488 and AAPA is not sensible, and would not lead to the claimed arrangement.

The Examiner respectfully disagrees. Matsushita '488 discloses in paragraph [0025] by generating a hierarchical structure of video and memorizing to the storage with video, when photoing video with the equipment equipped with photographing functions, such as a video camera, in this example arbitrary [based on a hierarchical structure] after photography-- it becomes oh, possible to generate the digest. AAPA discloses where since a moving image is divided in correspondence with the changing points of operation (pan, tilt) or states (focus and the like) of a moving image sensing device, a playback process from a desired location, a moving image edit process, and an automatic generation of a summary of a moving image can be achieved, thus allowing easy confirmation of the contents. Such method is effective especially when one moving image contains various subjects to be sensed or when an image sensing environment changes, see paragraph [0002]. Since both Matsushita '488 and AAPA both disclose to hierarchy the video image and AAPA is concerned with providing an effective method for playback process from a desired location, a moving image edit process, and an automatic generation of a summary of a moving image can be achieved, thus allowing easy confirmation of the contents. It is clear to the examiner that one of ordinary skill in the art would have been motivated to combine Matsushita '488 and AAPA for providing an effective playback process from desired locations, moving image edit process, and automatic generation of a summary of a moving image that



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allows easy confirmation of the contents, which would improve image processing; and the combination does not teach away from Matsushita '488.

#### V. Argument of Claim 13

Appellant argues on page 31 in view of the above, it is respectfully submitted that the Office Action's proposed combination of Matsushita '488 and AAPA is not supported by adequate rationale, such that the rejection under § 103 (a) should be reversed for this reason as well.

The examiner respectfully disagrees, and directs the Appellant to response provided above.

Appellant argues on page 32 that since independent Claim 12 is believed to be allowable for the reasons above, it logically follows that Claim 13, which is dependent therefrom, should be allowable for at least the same reasons. In view of these reasons, Appellant respectfully submits that the applied art fails to disclose or suggest the even further features defined in Claim 13.

The examiner respectfully disagrees. For at least the reasons provided above showing how the prior art teaches the limitations of claim 12, it is logically that claim 13 which is dependent therefrom, the examiner maintains that the prior teaches the limitations of claim 13. In addition, AAPA discloses For example, FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these

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Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Therefore, it is clear the examiner that the reference more than fairly suggest or teaches to set a hierarchy based on the division counts. Since AAPA discloses the division positions are based on a plurality of different items that are present together, it would have been obvious modification for one of ordinary skill in the art at the time of the invention to count the division information for providing enhanced image processing, which reads upon the claimed limitation.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the teachings of AAPA with Matsushita (modified by well known prior art) for providing more efficient image processing.

Appellant argues on page 32 that Appellant's Figure 17 does not disclose hierarchical upper and lower layers at all. Moreover, there is simply no suggestion to count a number or divisions for each type of division information, much less to use such a count to set a hierarchical order of the plurality of pieces of division information, as claimed.

The examiner respectfully disagrees. Since a hierarchy is defined as graded or ranked series (see Merriam Webster's Collegiate Dictionary, Tenth Edition), and Fig. 17 clearly discloses where the changing points are ordered by Gain, White Balance, Subject distance, Zoom and Pan. Therefore, fig. 17 clearly discloses where the order (hierarchy) of the changing points (division information) are in order of the Gain, White

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Balance, Pan, and Zoom. Further, the changing points are ordered by the Gain, White Balance, Subject distance, Zoom, and Pan, the examiner interprets this order to be a hierarchy, where the gain is higher white balance, white balance higher than subject distance, subject distance higher than zoom, and zoom higher than pan, which reads upon upper and lower layers. Thus, the examiner maintains that Fig. 17 discloses hierarchical upper and lower layers. Further, FIG. 17 is a view for explaining the conventional moving image dividing technique. (a) of FIG. 17 shows the changing points (Gain, White Balance, subject distance, Zoom, Pan) of the operation intervals and the states of the image sensing device with respect to a single moving image for respective items. (b) of FIG. 17 shows the image dividing result using these Gain, White Balance, subject distance, Zoom, and Pan items. As shown in (b) of FIG. 17, since division positions based on a plurality of different items are present together, the moving image is segmented into many intervals [0004]. Therefore, it is clear to the examiner that the reference more than fairly suggests and teaches to set a hierarchy based on the division counts. Since AAPA discloses the division positions are based on a plurality of different items that are present together, it would have been obvious modification for one of ordinary skill in the art at the time of the invention to count the division information for providing enhanced image processing, which reads upon the claimed limitation.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate the teachings of AAPA with Matsushita (modified by well known prior art) for providing more efficient image processing.

Appellant argues on page 32 that any proposed combination of Matsushita'488 and AAPA therefore can not possibly disclose or suggest setting a hierarchical order of the plurality of pieces of division information on the basis of division counts of division information.

The examiner respectfully disagrees and directs the Appellant to the response provided above.

Appellant argues on page 33, thus the applied art fails to disclose or suggest setting a hierarchical order of the plurality of pieces of division information on the basis of division counts of divisions information. Therefore, the rejection of Claim 13 should be reversed as well.

The examiner respectfully disagrees and directs the Appellant to the response provided above.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

is believed that the rejections should be sustained.

Respectfully submitted,

/Jessica Roberts/

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Examiner, Art Unit 2482

Conferees:

/Andy S. Rao/

Primary Examiner, Art Unit 2482

/Marsha D. Banks-Harold/

Supervisory Patent Examiner, Art Unit 2482